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List of Claims

What is claimed is:

1. (amended) A fuel/air delivery system for an internal combustion engine comprising: an intake system through which charge air is delivered to a Venturi; fuel is injected into the throat of the Venturi by means of a pressurized fuel injector; where said delivery system causes the pressure at the point of injection to be reduced due to the Bernoulli effect; whereby said delivery system facilitates fuel vaporization at the throat of the Venturi; whereby said delivery system thoroughly mixes air and fuel in the throat and discharge of the Venturi; and whereby said delivery system pressure is recovered at the discharge of the Venturi. ~~the pressure at the point of injection is reduced from the intake manifold due to the Bernoulli effect; fuel vaporization is facilitated by the reduced pressure at the throat of the Venturi; air and fuel are well mixed because of the turbulence in the throat and discharge of the Venturi; and most of the pressure lost in the throat of the Venturi is recovered at the discharge of the Venturi.~~

2. (amended) A fuel/air delivery system as stated in claim 1, whereby the performance and efficiency of the engine is improved by the introduction of fuel by means of a fuel injector located at the throat of the venturi.

3. (amended) A fuel/air delivery system as stated in claim 1, whereby the Venturi induction performance is complemented by a compressed air intake manifold from a supercharger or turbocharger compressor.

4. (amended) A fuel/air delivery system for an internal combustion engine comprising: an intake system through which charge air is delivered to a Venturi; fuel is injected into the throat of the Venturi by means of a pressurized fuel injector; whereby the action of the Venturi design is improved over the air flow range by incorporating a throttle valve into the Venturi inlet located upstream of the Venturi throat.

~~4. The action of the Venturi is improved over the air flow range by incorporating the throttle into the Venturi design, providing a variable throat area in the Venturi.~~

5. (amended) A fuel/air delivery system as stated in claim 1, whereby fuel heated from the exhaust manifold and subsequently injected into the Venturi will improve the thermal and combustion efficiency of the engine.